

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1. (currently amended) A computer-implemented method, ~~comprising: for~~ decompressing a trie including a node section containing a plurality of nodes, the method comprising, including:
 - ~~evaluating a first node of the trie;~~
 - identifying a tag bit in a ~~determining that the first node of the node section, the tag bit includes a tag flag having a setting for indicating that a multiple tagging in tag field, that does not contain the tag flag, is attached to the first node;~~
 - identifying a , and in response evaluating settings in the multiple-tag mask field in the first node based on the setting of the tag bit, the tag mask field being attached to the first node and including a plurality of bits;
 - ~~, and for each setting that indicates a tag, associating the first generating node with a category corresponding to that tag information based on settings of each bit in the tag mask field;~~
 - ~~evaluating a second node of the trie; and~~
 - ~~determining that the second node includes a tag flag having a setting indicating that a multiple tag field is not attached to the second node and~~
 - decompressing the trie based on the node information.
2. (currently amended) The method of claim 1 ~~wherein decompressing the trie further comprises,~~ comprising evaluating a ~~the~~ tag information field to determine that the trie was constructed to have at least one node with a multiple tag field.

3. (currently amended) The method of claim 1 wherein the ~~multiple-tag~~ mask field comprises a bitmask, and wherein evaluating each setting in the ~~multiple-tag~~ mask field comprises checking the value of each bit in the bitmask.
4. (original) The method of claim 3 further comprising, evaluating information in a header of the trie to determine a size of the bitmask.
5. (currently amended) The method of claim 1 ~~wherein decompressing the trie~~ further ~~comprises,~~ comprising checking a value field to determine which tags have values associated therewith.
6. (previously presented) The method of claim 1 wherein at least one tag has a value associated therewith, and further comprising, checking a value size array field to determine a size for each value associated with a tag.
7. (currently amended) The method of claim 1 ~~wherein decompressing the trie~~ further ~~comprises~~ comprising, checking a value size array field to determine which tags have values associated therewith.
8. (original) The method of claim 7 further comprising, checking the value size array field to determine a size for each value associated with a tag.
9. (previously presented) The method of claim 1 wherein the first node includes at least one partial enumeration count.
10. (previously presented) The method of claim 1 wherein the first node includes a partial enumeration count for at least one of the tags.

11. (original) A computer-readable medium having computer-executable instructions for performing the method of claim 1.

12. (withdrawn) A computer-readable medium storing information for enabling a device to perform a process, the process comprising:

determining whether nodes of a trie have respective tag flag settings that indicate whether or not the respective nodes have respective separate multi-tag fields attached thereto, where some of the processed nodes have a tag flag and a separate multi-tag field, and some of the processed nodes have a tag flag and do not have a separate multi-tag field;

in response to determinations that nodes have respective tag flag settings indicating that those nodes have respective multi-tag fields attached thereto, accessing settings in the multi-tag fields of those nodes;

in response to determinations that nodes have tag flag settings indicating that the nodes do not have respective multi-tag fields attached thereto, handling those nodes in accordance with such determinations.

13. (withdrawn) A computer-readable medium according to claim 12, where the process further comprises evaluating a flag of the trie to determine whether the trie is of a type that has multi-tag fields.

14. (withdrawn) A computer-readable medium according to claim 12, where the process further comprises using a mask to determine which tags of the multi-tag fields are active.

15. (withdrawn) A device configured to be capable of performing a process, the process comprising:

accessing a trie comprised of nodes, where the nodes comprise respective tag flags, where some of the nodes further comprise respective multi-tag fields, and where some of the nodes do not further comprise multi-tag fields;

determining whether or not nodes have respective multi-tag fields attached thereto by evaluating settings of the respective nodes' tag flags; and

for those of the nodes that have been determined to have multi-tag fields, using the multi-tag fields of those nodes to determine whether those nodes belong to various plural node categories.

16. (withdrawn) A device configured according to claim 15, wherein the process further comprises: for those of the nodes that have been determined to not have multi-tag fields, not determining whether those node belong to various plural node categories.

17. (withdrawn) A device configured according to claim 15, wherein the multi-tag fields vary in size.

18. (withdrawn) A device configured according to claim 15, wherein the process further comprises determining which tags in the multi-tag fields are valid.